

Date: Tuesday, 10/3/2006 3:43:48 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 206L/L3/L4/407 LOW, 407 HIGH GEAR SKID
 Job Number : 28848
 Estimate Number : 10552
 P.O. Number : N/A Part Number : D206642312
 This Issue : 10/3/2006 S.O. No. : N/A Drawing Number : N/A
 Prsht Rev. : NC Project Number : N/A
 First Issue : N/A Type : LANDING GEAR Drawing Revision : N/A
 Previous Run : 27337 Material : N/A
 Due Date : 10/30/2006 Qty: 1 Um: Each
 Written By : JD 061003
 Checked & Approved By : JD 061003
 Comment : Est Rev: 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM/
 EC

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-642-312 CHG004

KS 06.10.12 (1)

2.0 28848A 206 L HIGH GEAR SKIDTUBE



Comment: Sub-Component 206L/407 LOW, 407 HIGH GEAR SKIDTUBE

D206-642-341 B 28848A

3.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

PC 4/14/06 (1)

4.0 D2652 Bushing



Comment: Qty.: 24.0000 Each(s)/Unit Total: 24.0000 Each(s)

BUSHING

Pick:

Qty	Part Number	Description	Batch
✓ 24	D2652	Bushing	B28402 -
✓ 1	D206-642-341(REF)		B28848A

5.0 D2655 Ring



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

TOW RING

Pick:

Qty	Part Number	Description	Batch
✓			B27112 -

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Job Number: 28848

Part Number: D206642312

Job Number:



Seq. #:

Machine Or Operation:

Description :

1 D2655 Tow Ring

6.0

D2659

Lug Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

LUG ASSEMBLY

Pick:

Qty Part Number Description Batch

✓ 2 D2659

Lug Assembly

Batch
B28807

7.0

D2712

Set Screw



Comment: Qty.: 10.0000 Each(s)/Unit Total : 10.0000 Each(s)

SET SCREW

Pick:

Qty Part Number Description Batch

✓ 10 D2712

Set Screw

Batch
B26481

8.0

D29322

206 Saddle Right side



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SADDLE

Pick:

Qty Part Number Description Batch

✓ 1 D2932-2

Saddle

Batch
B28407

9.0

D29332

206 Saddle Right



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SADDLE

Pick:

Qty Part Number Description Batch

✓ 1 D2933-2

Saddle

Batch
B28408

10.0

D2934

Saddle Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

SADDLE SPACER

Pick:

Qty Part Number Description Batch

✓ 2 D2934

Saddle Spacer

Batch
B28920

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Process Sheet *vert*

Customer: CU-DAR001 Dart Helicopters Services

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Job Number: 28848

Part Number: D206642312

Job Number:



Seq. #:

Machine Or Operation:

Description :

11.0

D2935

Saddle Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

SADDLE SPACER

Pick:

Qty	Part Number	Description	Batch
✓ 2	D2935	Saddle Spacer	<u>B28921-</u>

12.0

D29382

206 Saddle Right side



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SADDLE

Pick:

Qty	Part Number	Description	Batch
✓ 1	D2938-2	Saddle	<u>B28863-</u>

13.0

D29392

206 Saddle Right Side



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SADDLE

Pick:

Qty	Part Number	Description	Batch
✓ 1	D2939-2	Saddle	<u>B27119-</u>

14.0

D2968043

Tow Ring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

TOW RING

Pick:

Qty	Part Number	Description	Batch
➔ 1	D2968-043	Tow Ring	<u>B28805</u>

15.0

AN337A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
✓ 4	AN3-37A	Bolt	<u>M14478-</u>

W/O:		WORK ORDER CHANGES					
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Job Number: 28848

Part Number: D206642312

Job Number:



Seq. #:

Machine Or Operation:

Description :

16.0

AN341A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
8	AN3-41A	Bolt	M102658

17.0

AN45A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
1	AN4-5A	Bolt	M100857

18.0

AN46A

Bolt



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
12	AN4-6A	Bolt	M102602

19.0

AN510A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
4	AN5-10A	Bolt	M101840

20.0

AN511A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
8	AN5-11A	Bolt	M102404

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Job Number: 28848

Part Number: D206642312

Job Number:



Seq. #:

Machine Or Operation:

Description :

21.0

AN512A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
✓ 4	AN5-12A	Bolt	M101943 -

22.0

AN960JD10

Washer



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

WASHER

Pick:

Qty	Part Number	Description	Batch
✓ 12	AN960JD10	Washer	M100743 -

23.0

AN960JD1016

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WASHER

Pick:

Qty	Part Number	Description	Batch
✓ 1	AN960JD1016	Washer	5519 -

24.0

AN960JD416

Washer



Comment: Qty.: 25.0000 Each(s)/Unit Total : 25.0000 Each(s)

WASHER

Pick:

Qty	Part Number	Description	Batch
✓ 25	AN960JD416	Washer	M102339 -

25.0

AN960JD516

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

WASHER

Pick:

Qty	Part Number	Description	Batch
✓ 8	AN960JD516	Washer	M100364 -

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Drawing Name: 206L/L3/L4/407 LOW, 407 HIGH GEAR SKID

Job Number: 28848

Part Number: D206642312

Job Number:



Seq. #:

Machine Or Operation:

Description :

26.0

AN9704

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WASHER

Pick:

Qty	Part Number	Description	Batch
✓ 1	AN970-4	Washer	M100181 -

27.0

MS21042L3

Nut



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

NUT

Pick:

Qty	Part Number	Description	Batch
✓ 12	MS21042L3	Nut	M101917 -

28.0

MS21042L4

Nut



Comment: Qty.: 13.0000 Each(s)/Unit Total : 13.0000 Each(s)

NUT

Pick:

Qty	Part Number	Description	Batch
✓ 13	MS21042L4	Nut	M19185 -

29.0

QC4



INSPECT 100% KITS FOR COMPLETENESS
not inspected for D206-642-312



Comment: INSPECT KITS 100% FOR COMPLETENESS

6/12/06 (1)
130612107

30.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D206-642-312

Location: 0

PPP Rev: 0

6/12/08 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206L/L3/L4/407 LOW, 407 HIGH GEAR SKID

Job Number: 28848

Part Number: D206642312

Job Number:



Seq. #:

Machine Or Operation:

Description :

31.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

①
S 06/12/11

Job Completion



U 06.12.11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Date: Tuesday, 10/3/2006 3:44:44 PM
User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 206 L HIGH GEAR SKIDTUBE
Job Number	: 28848A		
Estimate Number	: 10539		
P.O. Number	: <i>N/A</i>	Part Number	: D206642341
This Issue	: 10/3/2006	S.O. No.	: <i>N/A</i>
Prsht Rev.	: NC	Drawing Number	: D2650 REV E
First Issue	: <i>N/A</i>	Project Number	: N/A
Previous Run	: 28847A	Drawing Revision	: E
	Type : LANDING GEAR	Material	: <i>N/A</i>
Written By	: <i>[Signature]</i>	Due Date	: 10/30/2006
Checked & Approved By	: <i>[Signature]</i>	Qty:	1 Um: Each
Comment	: Est Rev: H 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-642-341 CHG002

N/A

2.0

D2620

Bent 206 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2620

Bent Tube 3" OD

1528932 Pm 06-11-70

3.0

D2647

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2647

Fwd Cap

324842 BE 06-11-70

4.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Deburr Fwd edge of tube

Pm 06-11-70

2-Remove ridge on inside of Fwd edge of tube as per Dwg D2650

Pm 06-11-70

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

A/R

Aluminum Rod

*m 10/655/m 10/1010**BE 06-11-70*

4-Grind weld flush to cap on top surface only.

Pm 06-11-80

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 10/3/2006 3:44:45 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 28848A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

5-Cut aft end to length as per dwg D2650

pmc 06-11-80

6-Drill pilot holes using drill Jig DT8168A (A,& B). Open to Ø0.312"

pmc 06-11-80

7-Drill holes for wearplates using DT 8028-5. Open to Ø0.297"

pmc 06-11-80

8-Open Aft Cap Hole using #6 Drill Bit

pmc 06-11-80

9-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-5 Drilling Detail

pmc 06-11-80

10-Remove inner indexing ridge on aft end of skidtube as per Dwg D2650

pmc 06-11-80

11-Deburr and Blow out all chips from inside the tube

pmc 06-11-80

5.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

M-B 06/11/13

6.0

D26545

206 I Beam (Web)



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2654-5

Web

B28855 M-B 06/11/14

7.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open holes to finished size as per Dwg D2650, D2650-5 Drilling Detail (without cutting fluid)

2-Countersink crossbolt spacer holes as per Dwg D2650 (without cutting fluid)

3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer.

4-Bond D2654-5 web in place as per QSI 015 Ensure holes line up Allow 12 Hrs. cure time before cutting

Start Date: *06/11/14* Time: *3:50 PM*

Finish Date: *06-11-16* Time: *10 AM*

A/R Sikaflex-291

M102660

Sikaflex expiry date: *07-02-01*

M-B 06/11/14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 28848A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

8.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

7-06-11-16 ①

9.0

D2649

Crossbolt Spacer



Comment: Qty.: 17.0000 Each(s)/Unit Total : 17.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

17 D2649

Crossbolt spacer

B228648

BE 06-11-17

(P.D.)

10.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

A/R Aluminum Rod *M101010*

BE 06-11-17

2-Grind welds flush as per Dwg D2650. Masking Tape access to inside of the Skidtube

Pm' 06-11-20 ①

3-Counterbore 5/16" x 0.750" deep as per Dwg D2650Deburr

Pm' 06-11-20 ①

11.0

D2680041

Nut Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2680-041

Nut Plate

B24203

Pm' 06-11-20 ①

12.0

CCR264SS33

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 CCR264SS3-3

Rivets

M15548

Pm' 06-11-20 ②

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
06/11/17	9.0	D2649 (B2B648) 19 CROSSBOLT SPACERS REQUIRED	BE	06/11/17			06/11/17

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ED Date: 06/12/17
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Job Number: 28848A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

M7885343

Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 M7885/3-4-3

Rivets M19099

Pm 06-11-20 (7)

14.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install D2680-041 Nut Plate as per Dwg D2650

Pm 06-11-20 (1)

15.0

QC5/9

WELD INSPECTION



Comment: WELD INSPECTION

DA 06/11/21 (1)

16.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White (Ref. 4.3.5.1) as per QSI 005 4.3

Make sure Nut Plate Thread protected use paint screw

Ylam 06/11/27 X1

17.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FC 06/11/28 (1)

18.0

D26483

Wearpad



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Pick:

Qty Part Number

Description Batch

6 D2648-3

Wearpad B28123

19.0

D265611

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-11

Wearshoe B21095

a-m 06/11/28 (1)

W/O:		WORK ORDER CHANGES					
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Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 28848A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

D265623

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-23

Wearshoe B24846

21.0

D265635

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-35

Wearshoe D26206

22.0

D34291



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3429-1

Wearpad B29201

23.0

ALS41032130

Insert



Comment: Qty.: 54.0000 Each(s)/Unit Total : 54.0000 Each(s)

Pick:

Qty Part Number

Description Batch

54 ALS4-1032-130

Inserts M18964

or (see QSI 017)

24.0

AN960JD10L

Washer



Comment: Qty.: 54.0000 Each(s)/Unit Total : 54.0000 Each(s)

Pick:

Qty Part Number

Description Batch

54 AN960JD10L

Washer M102217

a.m 06/11/28 ① ✓

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 10/3/2006 3:44:45 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 28848A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

25.0

MS27039108

Screw



Comment: Qty.: 54.0000 Each(s)/Unit Total : 54.0000 Each(s)

Pick:

Qty Part Number

Description Batch

54 MS27039-1-08

Screw

M102404

26.0

D26511

Plug



Comment: Qty.: 14.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick:

Qty Part Number

Description Batch

14 D2651-1

Plugs

B28697 B29005

27.0

D26513

O-Ring



Comment: Qty.: 14.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick:

Qty Part Number

Description Batch

14 D2651-3

O-Rings

B28692 B28692

28.0

AN960JD416

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 AN960JD416

Washer

M1151

29.0

MS27039406

Screw



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 MS27039-4-06

Screw

M6874

a.m 00/11/2006

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 10/3/2006 3:44:46 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 28848A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

30.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2646

Aft Cap D28041

31.0

AN960JD10L

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 AN960JD10L

Washer M102404 M102217

32.0

MS27039108

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 MS27039-1-08

Screw M102217 M102404

a.m 06/11/28

33.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/R Sikaflex-291

Sikaflex expiry date:

M102606
02/07

2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D2650. Clean excess adhesive

3-Install MS27039-4-06 Screw as per DEO 9153

4-Inspect for foreign object per QSI 024

5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive

A/R Sikaflex-291

Sikaflex expiry date:

M102606
02/07

a.m 06/11/28

6-Wing Walk as per Dwg D2650-5 and QSI 005 4.4

Batch: 102635

> y/c

06/11/28 x1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 10/3/2006 3:44:46 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 28848A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

34.0

QC3/5

INSPECT WORK/WING WALK



Comment: INSPECT WORK/WING WALK

10/6/11/28 (1)

35.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

N/A

36.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

(1)

Doc 112/11

Job Completion



u 06.12.11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN <i>AP</i>	DRAWN BY <i>AP</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>PH</i>	APPROVED <i>PH</i>	DRAWING NO. D2650	REV. E SHEET 1 OF 5
DATE 06.03.30		TITLE 206/407 SKIDTUBE ASSEMBLIES SCALE NTS	
A	97.03.25	NEW ISSUE	
B	97.06.26	AS MANUFACTURED CHANGES	
C	97.10.29	CHANGE HOLE PATTERN AND FRONT END	
D	04.05.17	REDRAW; INCORP. DE09136/9153/9163 MOD GROUND HNDLNG ON D2650-1/-3	
E	06.03.30	RMV C'BORE, CHG DRILL, ADD CHAMFER	

RELEASED
06 04 17 *PH*

Qty -1	Qty -3	Qty -5	Qty -7	Part Number	Description
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
16	17	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

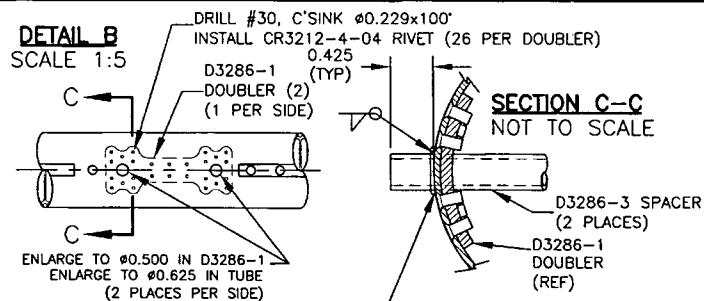
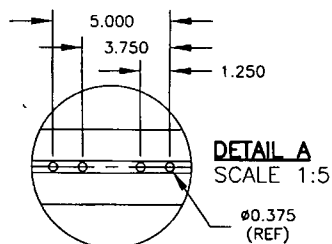
NOTES

- 1) WELD PER DART QSI 004
- 2) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 3) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 4) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 5) FINISH:
-CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 6) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 7) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

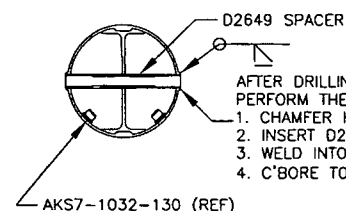
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SECTION C-C
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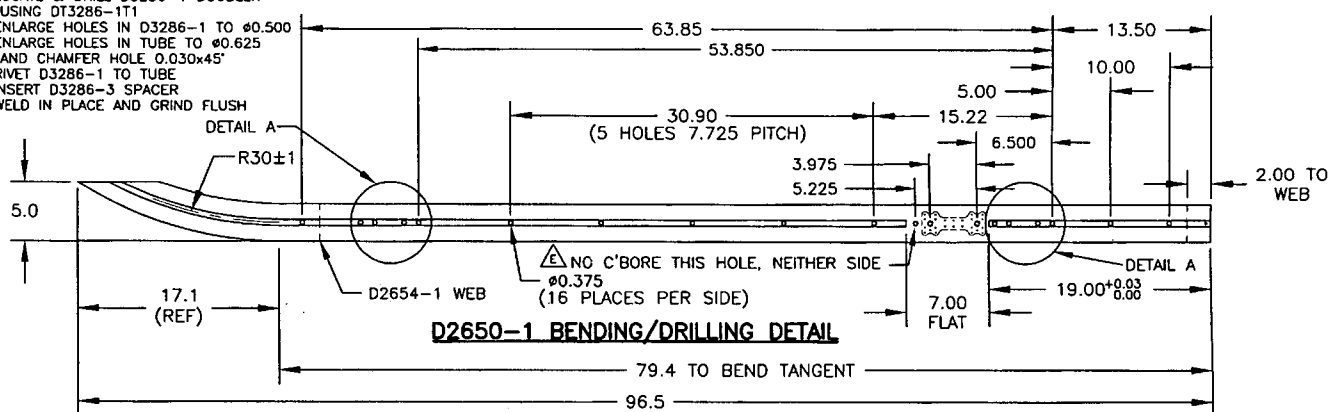
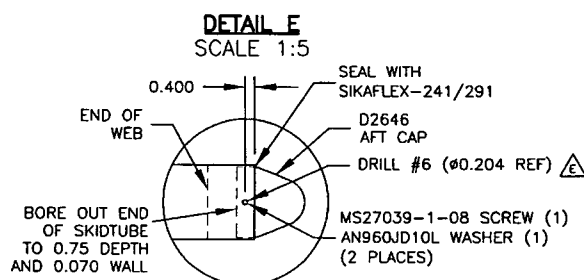


DETAIL D
FOR 0.375 HOLES ONLY

- AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR 0.375 HOLES ONLY:
1. CHAMFER HOLE 0.030 X 45°
 2. INSERT D2649 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C'BORE TO 0.313 X 0.75 DEEP

RELEASED

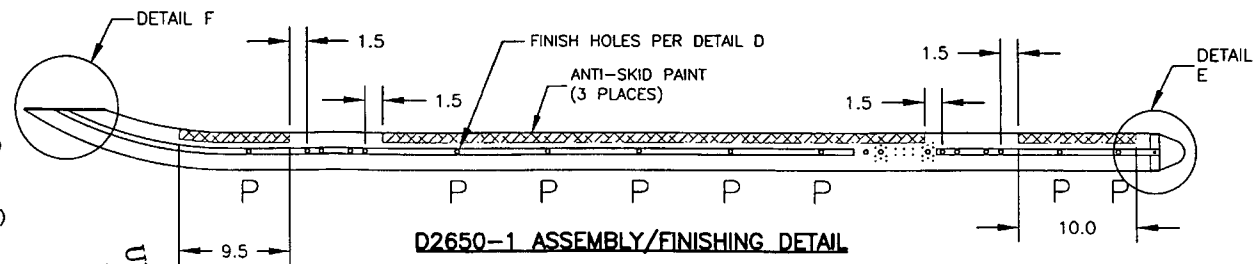
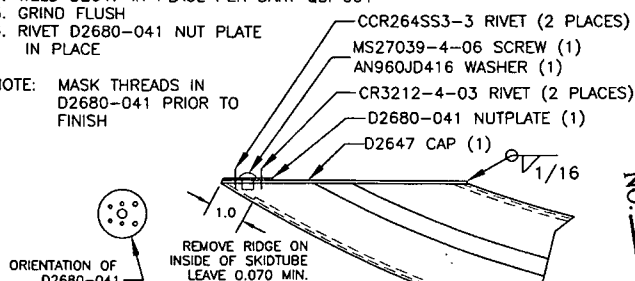
06.03.30



DETAIL F (NOT TO SCALE)

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D2647 (TRIM AS NECESSARY)
4. WELD D2647 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D2680-041 NUT PLATE IN PLACE

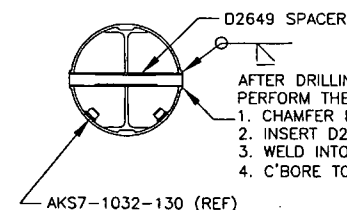
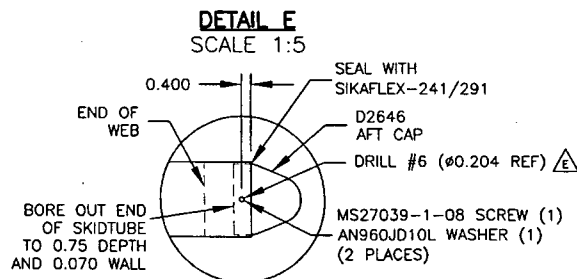
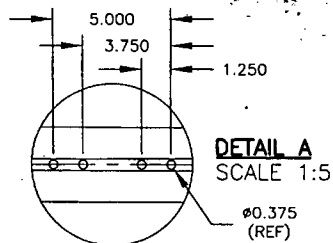
NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH



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DATE 06.03.30		TITLE SKIDTUBE		SCALE 1:10	

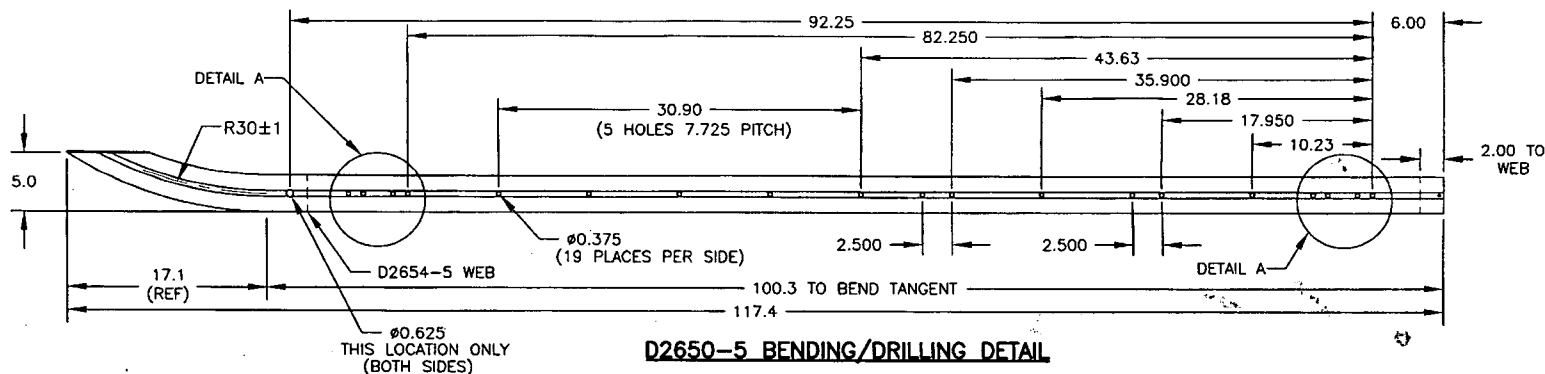
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NO. 28848A



AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:

1. CHAMFER HOLE 0.030 X 45°
2. INSERT D2649 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE TO Ø0.313 X 0.75 DEEP

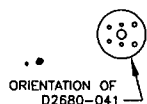
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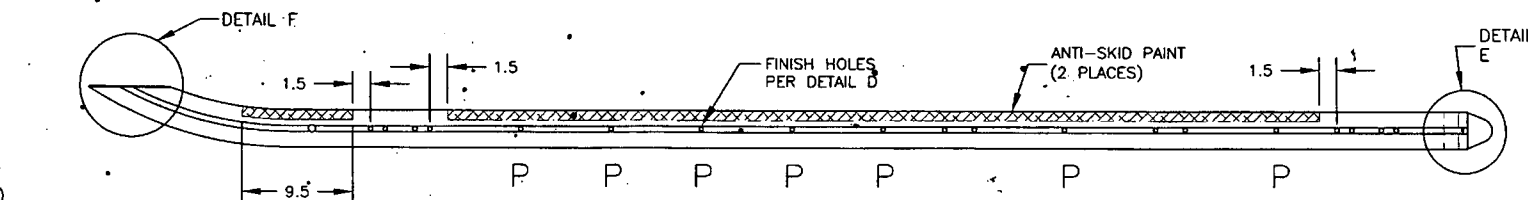
DETAIL F (NOT TO SCALE)

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D2647 (TRIM AS NECESSARY)
4. WELD D2647 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D2680-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH

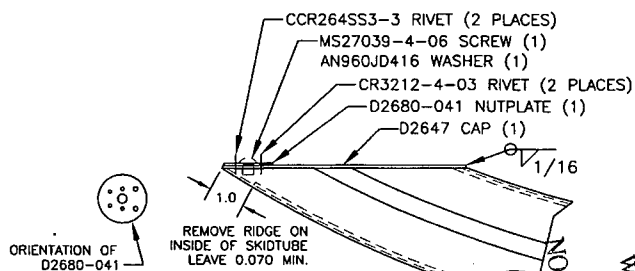
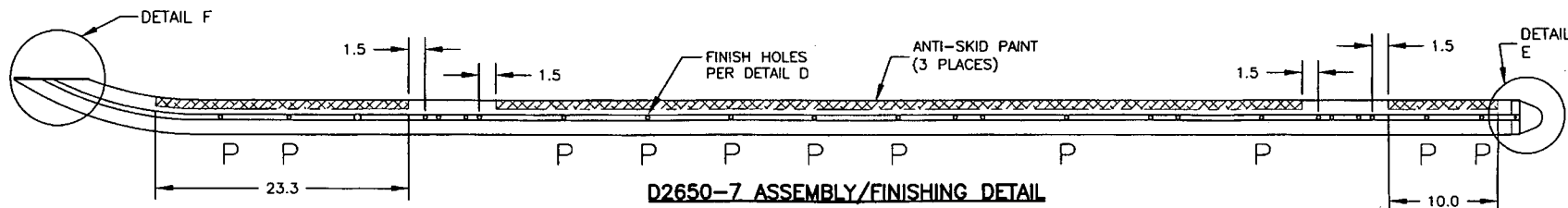
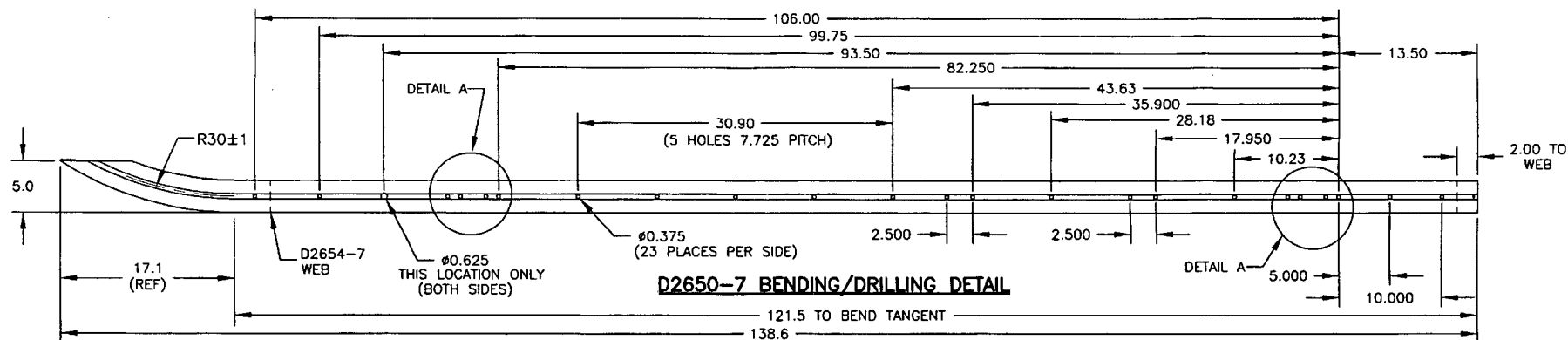
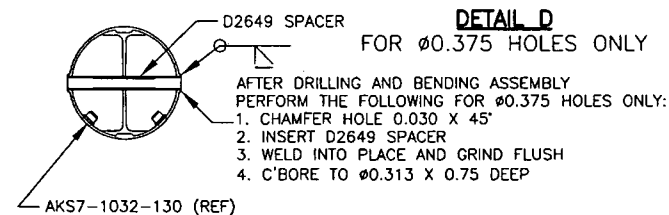
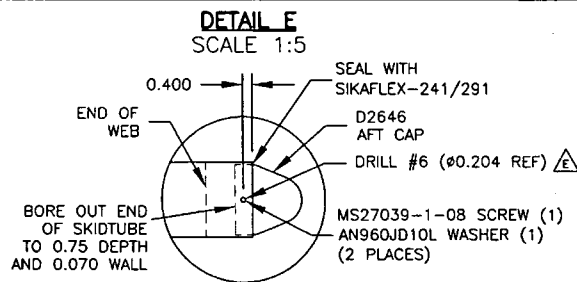
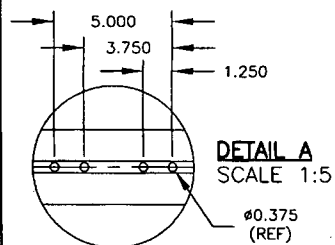


REMOVE RIDGE ON INSIDE OF SKIDTUBE LEAVE 0.070 MIN.



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		DATE	06.03.30			D2650	SHEET 4 OF 5
						SKIDTUBE	SCALE 1:10



- DETAIL F (NOT TO SCALE)**
1. CUT TUBE LEVEL
 2. REMOVE RIDGE ON FWD SIDE
 3. LOCATE D2647 (TRIM AS NECESSARY)
 4. WELD D2647 IN PLACE PER DART QSI 004
 5. GRIND FLUSH
 6. RIVET D2680-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH

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DESIGN	UP	DRAWN BY	UP	DART DART AEROSPACE USA, INC. PORT HADLOCK, MA	REV. E
CHECKED	PH	APPROVED	PH	DRAWING NO. D2650	SHEET 5 OF 5
DATE	06.03.30	TITLE	SKIDTUBE	SCALE	1:10

RELEASED
a.v.m.

NO. 76

AWS D17.1.2001 QUALIFICATION TEST RECORD

Name Barclay Elliott
 Joint Welding Procedure Tig
 Part number and Job number D20664341 / B28849 A

TEST WELDS REQUIRED

BASE METAL Alum WELDING PROCESS Tig
 Penetration Complete ☐ Partial ☒ Single Weld ☒ Double Weld ☐
 Current AC ☒ DC ☐ Backing YES ☐ NO ☒

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input checked="" type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input checked="" type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐
 Penetration Pass ☒ Fail ☐

Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 06/11/16 Qualifier David Arnold